

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
 )  
Amendment of Part 90 of the Commission's Rules ) WP Docket No. 07-100  
 )

**COMMENTS OF THE NATIONAL TELECOMMUNICATIONS  
AND INFORMATION ADMINISTRATION**

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## **EXECUTIVE SUMMARY**

The National Telecommunications and Information Administration would like to commend the Federal Communications Commission (Commission) for initiating this proceeding to review and update the rules for emergency communications used by public safety agencies. Over the years, the Commission has received informal complaints about very high frequency paging systems interfering with two-way voice communication systems. The federal spectrum managers responding to Hurricane Katrina also identified interference on Emergency Medical Service (EMS) and Search and Rescue (SAR) channels that could be attributed to hospital paging systems. High volume paging systems cannot operate co-channel with voice communication systems in the same geographic area. In order to avoid interfering with critical frequencies used to support EMS and SAR personnel, paging operations must be restricted to one-way transmissions used to alert ambulance and rescue squad personnel.

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The National Telecommunications and Information Administration (NTIA), an Executive Branch agency within the Department of Commerce, is the President's principal adviser on domestic and international telecommunications policy, including policies relating to the Nation's economic and technological advancement in telecommunications. Accordingly, NTIA makes recommendations regarding telecommunications policies and presents Executive Branch views on telecommunications matters to the Congress, the Federal Communications Commission (Commission), and the public. NTIA, through the Office of Spectrum Management, is also responsible for managing the federal government's use of the radio frequency spectrum. NTIA respectfully submits the following comments in response to the Commission's Notice of Proposed Rulemaking (NPRM) and Order in the above-captioned proceeding.<sup>1</sup>

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1. *Amendment of Part 90 of the Commission's Rules*, Notice of Proposed Rulemaking and Order, WP Docket No. 07-100 (released May 14, 2007) ("NPRM").

## I. INTRODUCTION

Emergency incidents, whether caused by natural disasters such as hurricanes, traffic accidents, fires, civil disturbances, or terrorism require a seamless coordinated response from government. The aftermath of Hurricane Katrina demonstrated the importance of coordination among state, local, and federal public safety officials. Federal spectrum managers from the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) deployed to the Hurricane Katrina operational area identified several cases of interference affecting the use of Emergency Medical Service (EMS) and Search and Rescue (SAR) very high frequency (VHF) channels. In the NPRM, the Commission addresses issues related to interference on VHF public safety frequencies.<sup>2</sup> NTIA offers the following comments in response to specific issues raised by the Commission in the NPRM.

## II. INCOMPATIBLE PAGING OPERATIONS SHOULD NOT BE PERMITTED ON THE EMERGENCY MEDICAL SERVICE MUTUAL AID AND SEARCH AND RESCUE CHANNELS.

The 155.34 MHz frequency is the channel most commonly used for EMS and ambulance service providers (public and private). Acadian Ambulance Service, which serves 50% of the State of Louisiana, uses 155.34 MHz because it is mandated by the State EMS. Based on reports from DHS and FEMA spectrum managers, this frequency could not be used around New Orleans and Baton Rouge to aid victims of Hurricane Katrina because of interference from paging systems. A review of the Commission's frequency assignment database indicates that there are several hospitals in this area legally operating paging systems using 155.34 MHz.<sup>3</sup> According to the DHS and FEMA spectrum managers, the hospital emergency departments operating the

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2. *Id.* at ¶ 6.

3. The October 2005 Frequency Assignment Retrieval System.

paging systems are unaware that they are interfering with the State EMS operations.

Section 90.20 of the Commission's Rules designates 155.34 MHz as a medical communications "mutual aid" frequency.<sup>4</sup> Experience has shown that paging and voice operations can generally operate on the same channel in the same area, provided the paging transmissions are infrequent and the paging licensee monitors the channel prior to transmitting. However, the potential for paging transmissions to interfere with voice operations increases as the amount of paging traffic increases. Two-way voice communications and the high volume of paging often associated with large hospitals are not compatible with one another on the same channel.<sup>5</sup>

NTIA believes that mutual aid voice transmissions on 155.34 MHz should have priority over other transmissions. EMS voice communication users of this frequency should not have to accept the noise-like interference resulting from paging tones that can be distracting and affect the ability of emergency responders to perform their duties. In many cases, emergency responders subjected to such noise will either turn the radio off or turn the volume down low enough to remove the annoyance, which is often too low to hear legitimate radio traffic. Moreover, if the hospital is not monitoring the channel, there is no incentive for the ambulance providers to install radios on the mutual aid frequency. Therefore, when the mutual aid channel is needed, such as during Hurricane Katrina, it will not be available.

Almost all Search and Rescue (SAR) groups are licensed to use the frequency of 155.16 MHz. Although 155.16 MHz is not designated as such by the Commission's Rules, it is the

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4. See 47 C.F.R. § 90.20(d)(40). The frequency 155.34 MHz may be designated by common consent as an intersystem mutual assistance frequency under an area-wide medical communications plan.

5. *Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service*, Report and Order, PR Docket No. 91-72, 8 FCC Rcd 1454, 1457 ¶17 (1993).

interoperability channel common to virtually all SAR groups nationwide. Similar to the situation that exists on the EMS mutual aid frequency 155.34 MHz, DHS and FEMA spectrum managers report that SAR operations also suffer intolerable interference from hospital paging operations on 155.16 MHz. Even in remote areas, far away from hospitals, SAR personnel are constantly distracted by paging transmissions on their voice channels.

Techniques such as continuous-tone-coded squelch systems (CTCSS) can be employed in voice communication systems to keep out extraneous transmitters on the same frequency. However, CTCSS does not work when the high power paging transmissions block the lower power signals from hand-held radios operating in difficult terrain. Ideally, SAR operations should have dedicated nationwide channels. However, given the low-utilization of such channels, and the high demand for VHF spectrum, dedicated channels are not practical. Most organizations are volunteer groups, working at the request of local emergency management or law enforcement authorities. Any solution requiring these SAR organizations to abandon their investment in VHF radios is not practical because there is no charge for these services, and these groups have no income stream to pay for a transition to another technology.

Authorization to conduct paging operations that are incompatible with ambulance or rescue squad EMS mutual aid and SAR voice operations should not be permitted unless such paging can be done in such a way that it does not interfere with voice operations. In order to satisfy this requirement, NTIA recommends that the paging transmissions on the EMS frequency on 155.34 MHz and SAR frequency of 155.16 MHz be limited to one-way transmissions to alert ambulance and rescue squad personnel.

### III. CONCLUSION

NTIA commends the Commission for initiating this proceeding to review and update the rules for emergency communications used by public safety agencies. Interference-free frequencies used by EMS and SAR personnel are necessary when responding to emergency situations. NTIA recommends that the Commission prohibit incompatible paging operations on the frequencies used for EMS and SAR operations.

For the foregoing reasons, NTIA submits these comments.

Respectfully submitted,

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